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TITLE : BENDING TUBE TYPE FLUORESCENT LAMP

ABSTRACT : PURPOSE: To improve peeling off of a protection layer, uneven luminescent color, and damping of luminous flux by forming a transparent protection layer containing very fine alumina powder and metal borate on the inner surface of a bulb, and forming a luminescent layer containing phosphors more than one and large particles having ultraviolet ray reflecting property thereon.

CONSTITUTION: A transparent protection layer containing very fine alumina powder and metal borate is formed on the inner surface of a glass bulb comprising low lead glass including soda glass. A luminescent layer containing a plurality of phosphors having a mean particle size of 1–4 μ m and luminescent peaks in three wave length regions and large particles having a mean particle size of 4–10 μ m and ultraviolet ray resistant and ultraviolet ray reflecting properties is formed on the protection layers. The mixing ratio of large particles is limited to 10–60wt% to the total luminescent layer materials. Ultraviolet ray generated in lighting is directly absorbed in the phosphor in the luminescent layer or indirectly absorbed since it is reflected by the protection layer and alumina in the luminescent layer to effectively emit light. Since ultraviolet ray reached the protection layer is reflected by very fine alumina powder, its penetration into the inner surface of the bulb is prevented. Therefore, solarization is prevented.

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